



A REPORT

ON

AN INDUCED POLARIZATION SURVEY

Wolf Lake, Yukon Territory

FOR

ARCHER, CATHRO & ASSOCIATES LIMITED

Vancouver, British Columbia

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ _____

BY

Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.

PETER E. WALCOTT & ASSOCIATES LIMITED

Vancouver, British Columbia
Commissioner of Yukon Territory

SEPTEMBER 1972

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MAP POCKET

CONTOURS OF APPARENT RESISTIVITY - Scale 1" = 400 ft. W-159-1 a = 300 n = 1		
CONTOURS OF APPARENT RESISTIVITY a = 300 n = 2	"	" W-159-2
CONTOURS OF APPARENT CHARGEABILITY a = 300 n = 1	"	" W-159-3
CONTOURS OF APPARENT CHARGEABILITY a = 300 n = 2	"	" W-159-4

INTRODUCTION

Between August 19th and 30th, 1972, Peter E. Walcott & Associates Limited carried out an induced polarization (I.P.) survey over a part of a property, located in the Wolf Lake area of the Yukon Territory, held by a group known as the Wolf Lake Joint Venture.

The survey was carried out over a handcut line grid, the lines of which were turned off at right angles from a N 45° E baseline, and which were chained and picketed at 100 foot intervals.

Measurements (first to second separation) of apparent chargeability (the I.P. response parameter) were made using the "pole - dipole" method of surveying with a 300 foot dipole. Simultaneous measurements of apparent resistivity were also made.

The chargeability and resistivity data are presented on individual profiles bound in this report, and also in contour form on Maps W-159-1 to 4 that accompany this report.

PROPERTY, LOCATION AND ACCESS

The property is located in the Watson Lake Mining Division of British Columbia and consists of the following claims:

MUNG 1 - 20

The claims are situated on the west side of Wolf Lake straddling Wolf River.

Access is obtained by means of float plane from Whitehorse, about 110 airmiles to the west.

PREVIOUS WORK

Previous work on the property consists of geological prospecting and soil sampling carried out by Archer, Cathro & Associates Limited in the summer of 1972.

The results of this work are documented in a report by the staff of the forementioned company.

PURPOSE

The purpose of the survey was to investigate the possibility of a disseminated sulphide deposit as suggested by local appearances of mineralized float and by the favourable geological environment.

GEOLOGY

The reader is referred to the forementioned report by Archer, Cathro & Associates Limited.

SURVEY SPECIFICATIONS

The induced polarization (I.P.) survey was carried out using a pulse-type system manufactured by Hunttec Limited of Toronto, Ontario. Measurements with this system are made in the time domain.

The system consists basically of three units: a receiver, a transmitter and a motor-generator. The transmitter, which provides a maximum of 7.5 kw d.c. to the ground, obtains its power from the 7.5 kw 400 cycle, three phase generator driven by a gasoline engine. The cycling rate of the transmitter is 1.5 seconds "current-on" and 0.5 seconds "current-off" with the pulses reversing continuously in polarity. The data recorded in the field consists of careful measurements of the current (I) in amperes flowing through electrodes C₁ and C₂, the primary voltage (V) appearing between the two potential electrodes, P₁ and P₂, during the "current-on" part of the cycle, and a secondary or overvoltage (V_S) appearing between P₁ and P₂ during the "current-off" part of the cycle.

The apparent chargeability (M_a) is calculated by dividing the secondary voltage by the primary voltage and multiplying by 400, which is the sampling time in milliseconds of the receiver unit. The apparent resistivity (P_a) in ohm-meters is proportional to the ratio of the primary voltage and the measured current, the proportionality factor depending on the geometry of the array used. The chargeability and resistivity obtained are called apparent as they are values which that portion of the earth sampled would have if it were homogeneous. As the earth sampled is usually inhomogeneous the calculated apparent chargeability and resistivity are functions of the actual chargeability and resistivity of the rocks.

The survey was carried out using the "pole-dipole" method of surveying. In this method the current electrode C₁ and the two potential electrodes, P₁ and P₂, are moved in unison along the survey lines. The spacing "na" (n an integer) between C₁ and P₁ is kept constant for each traverse at a distance roughly equal to the depth to be explored by that traverse, while that of P₁ - P₂ (the dipole) is kept constant at "a". The second current electrode C₂ is kept fixed at "infinity".

Thus, on a "pole-dipole array" traverse with an electrode spacing of 200 feet, a body lying at a depth of 100 feet will produce a strong response, whereas the same body lying at a depth of 200 feet will only just be detected. By running subsequent traverses at different electrode separations, more precise estimates can be made of depth, width, thickness and percentage of sulphides of causative bodies located by the I.P. method.

SURVEY SPECIFICATIONS cont'd

The survey was carried out using a 300 foot dipole and obtaining first and second separation measurements over the area surveyed.

DISCUSSION OF RESULTS

The results of the I.P. survey, as performed with a 300 foot dipole, shows most of the area surveyed to be anomalous, as indicated by the 5 millisecond contour on Maps W-159-3 & 4, based on the limited background chargeability values obtained.

Good correlation is obtained between the $n = 1$ and $n = 2$ results with slightly higher values and broader features on the latter.

Stronger responses are observed within the anomalous area and most probably represent an increase in the content and/or decrease in depth of burial of polarizable material. These are most apparent on the individual line profiles where an effort has been made to separate them (it should be noted here that, as it is not possible to locate an anomaly more accurately than half the spread length, the length of the indicated anomaly along the profiles should not be taken to represent the edges of anomalous material).

The resistivity survey did little except indicate overburden thickness and conductivity and bedrock conductivity.

Additional work done on Line 0 using a 100 foot dipole and taking first and second separation measurements showed an apparent double peak effect over the stronger anomaly indicating a possible narrow shallow causative source, and suggesting a deeper source for the weaker anomaly to the west.

This raises uncertainties as to the causative sources of the anomalies, i.e. could be caused by a series of narrow causative sources whose responses average together to give the broad response on the wider separations or they could have one inhomogeneous causative source with individual shallower offshoots containing more polarizable material. Unfortunately considerably more detail work would be required to resolve this ambiguity.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Between August 19th and 30th, 1972, Peter E. Walcott & Associates Limited carried out a limited induced polarization survey over a property managed by Archer, Cathro & Associates Ltd.

The Property, i.e. the Mung claims, is located in the Wolf Lake area of the Yukon Territory.

The I.P. survey showed most of the area surveyed to be anomalous based on limited background values.

Stronger responses were observed within this anomalous area.

Additional work done with smaller dipoles suggested a narrow causative source for the strong anomaly on Line 0, raising ambiguity as to the possible causative sources of the anomalies as discussed in the previous section.

As a result the writer believes that, as the geological setting is supposed to be that of a porphyry environment, the causative source is most probably sulphide mineralization inhomogeneously distributed throughout the anomalous area.

He therefore recommends that the anomalous area be investigated by borehole techniques.

Drilling locations should be selected based on the above results plus those of ground magnetic and geochemical surveys, and geological investigations believed to have been carried out (the usefulness of the latter two might be in some way suspect as it is understood that the area is entirely drift covered although some geochemical response could be expected in light of the shallow depth of burial of the anomaly on Line 0).

One 60° hole should be collared on Line 0 and drilled westwards so as to intersect 22 E at 100 feet perpendicularly below the surface.

Should encouraging results be obtained then the I.P. coverage should be extended to properly delineate the anomalous area.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LIMITED


Peter E. Walcott, P.Eng.
Geophysicist

Vancouver, B.C.
September 1972

APPENDIX

COST OF SURVEY

Peter E. Walcott & Associates Limited undertook the I.P. survey on a daily basis. Mobilization and some draughting costs were extra so that the total cost of services provided was \$4,320.00.

PERSONNEL EMPLOYED ON SURVEY

<u>Name</u>	<u>Occupation</u>	<u>Address</u>	<u>Dates</u>
G. MacMillan	Geophysical Operator	Peter E. Walcott & Associates Limited 605 Rutland Court, Coquitlam, B.C.	Aug. 19th - Aug. 30th, 72
V. Pashniak	" "	" "	Sept. 18th, 19th, 1972
J. Walcott	Typing	" "	November 9th, 72
W. Wadman	Draughting	Versatile Drafting Ltd.	Sept. 26th - 30th, Oct. 26th - 31st, Nov. 8th - 9th, 1972
D. McManus	Helper	Archer, Cathro & Assoc. Whitehorse, Y.T.	Aug. 20th - 29th, 1972
M. Smith	"	"	"
J. Rance	"	"	Aug. 22nd, 1972
E. Jensen	"	"	Aug. 13rd - 29th, 1972

CERTIFICATION

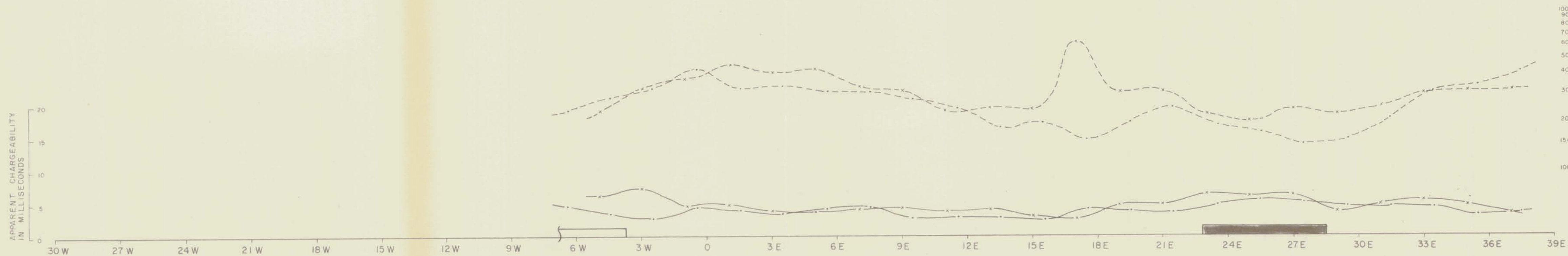
I, Peter E. Walcott of the Municipality of Coquitlam, British Columbia, hereby certify that:

1. I am a Graduate of the University of Toronto in 1962 with a B.A.Sc. in Engineering Physica, Geophysics Option.
2. I have been practising my profession for the last ten years.
3. I am a member of the Association of Professional Engineers of British Columbia, Ontario and the Yukon Territory.
4. I hold no interest, direct or indirect, in the securities or properties of the Wolf Lake Joint Venture Syndicate, nor do I expect to receive any.

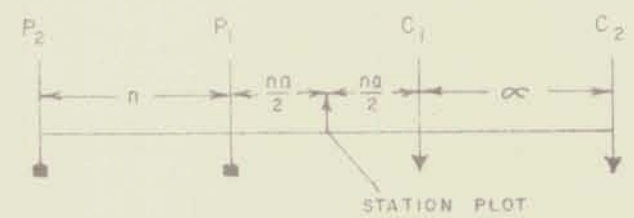


Peter E. Walcott, P.Eng.

Vancouver, B.C.
September 1972



POLE - DIPOLE ARRAY



C₁ is to the West for Lines 20S—20N

CHARGEABILITY

RESISTIVITY

..... a = 300'

.....

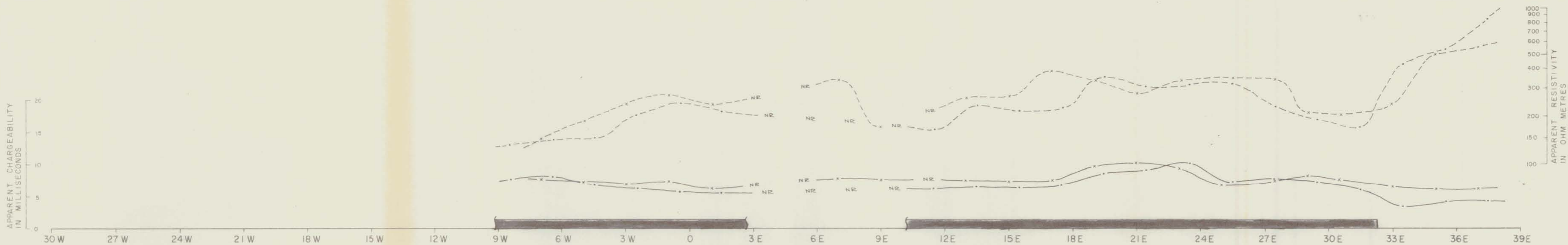
x---x a = 600'

x---x

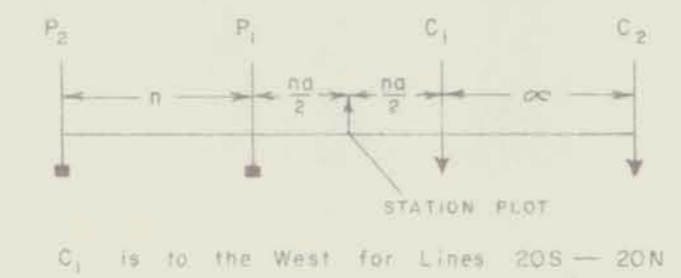
WOLF LAKE JOINT VENTURE
INDUCED POLARIZATION SURVEY
PROFILES OF APPARENT
CHARGEABILITY AND RESISTIVITY

LINE 20S

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



CHARGEABILITY	RESISTIVITY
— · — · — ·	-----
x — x — x	x-----x

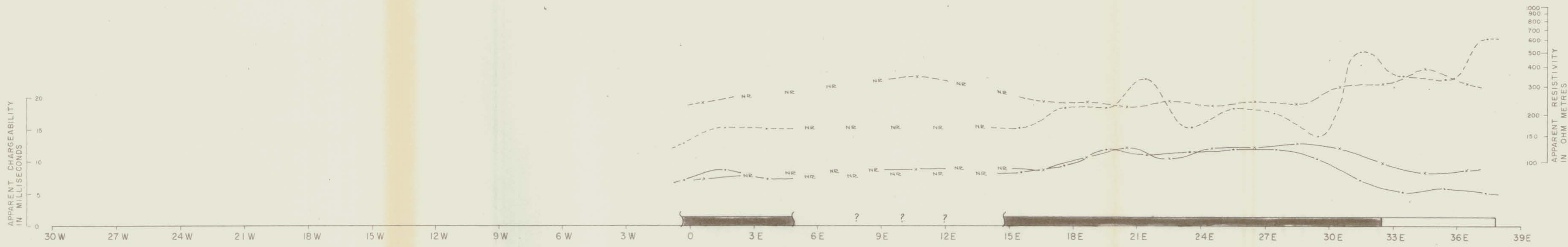
a = 300'

a = 600'

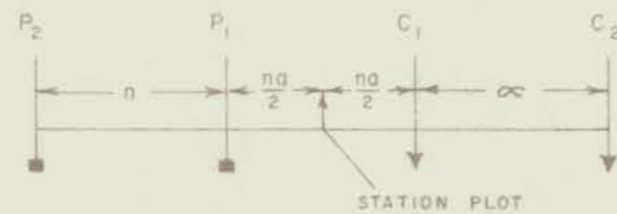
WOLF LAKE JOINT VENTURE
 INDUCED POLARIZATION SURVEY
 PROFILES OF APPARENT
 CHARGEABILITY AND RESISTIVITY

LINE 10S

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



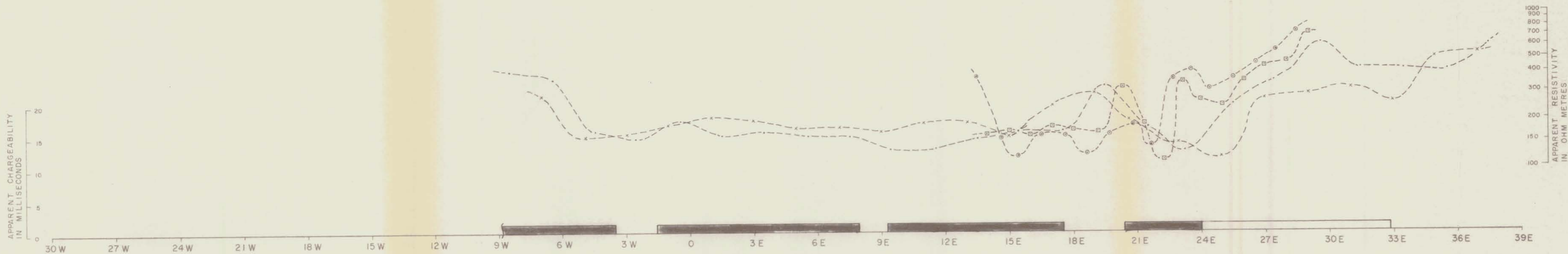
C₁ is to the West for Lines 20S — 20N

CHARGEABILITY	RESISTIVITY
..... a = 300'	-----
-x-x-x-x- a = 600'	-x-x-x-x-

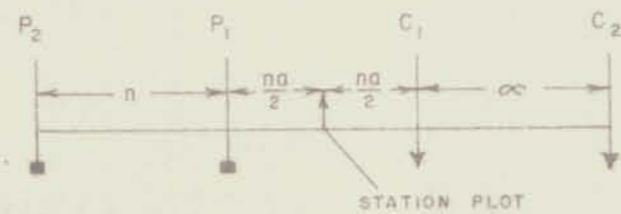
WOLF LAKE JOINT VENTURE
 INDUCED POLARIZATION SURVEY
 PROFILES OF APPARENT
 CHARGEABILITY AND RESISTIVITY

LINE 5S

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



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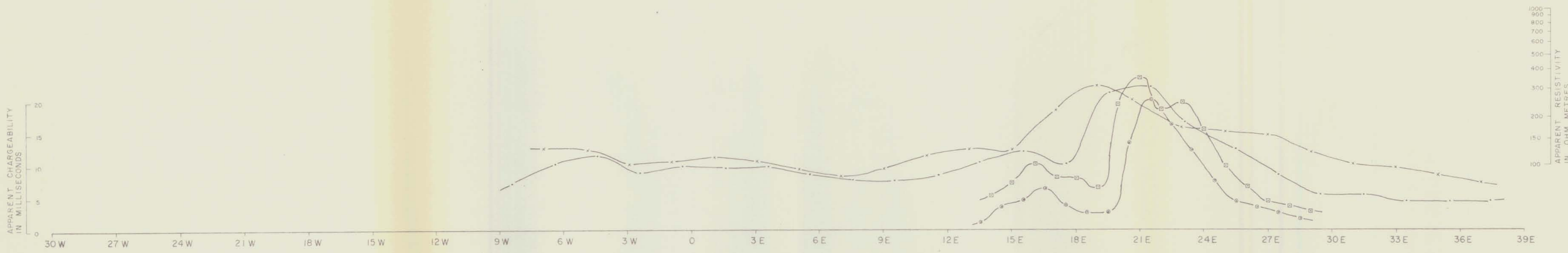
RESISTIVITY

- $a = 100', n = 1$
- $a = 100', n = 2$
- $a = 300', n = 1$
- x-----x $a = 300', n = 2$

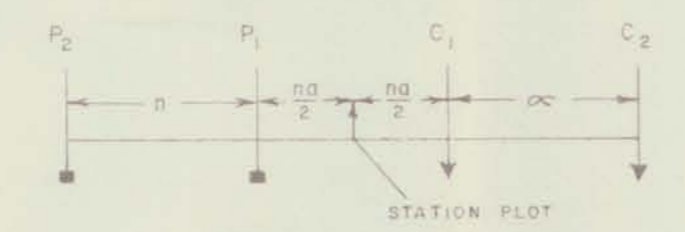
WOLF LAKE JOINT VENTURE
INDUCED POLARIZATION SURVEY
PROFILES OF APPARENT
RESISTIVITY

LINE 0+00

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



CHARGEABILITY

- a = 100', n = 1
- a = 100', n = 2
- a = 300', n = 1
- x—x—x a = 300', n = 2

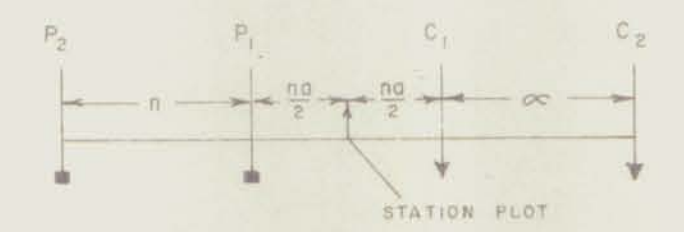
WOLF LAKE JOINT VENTURE
 INDUCED POLARIZATION SURVEY
 PROFILES OF APPARENT
 CHARGEABILITY

LINE 0+00

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



C₁ is to the West for Lines 20S - 20N

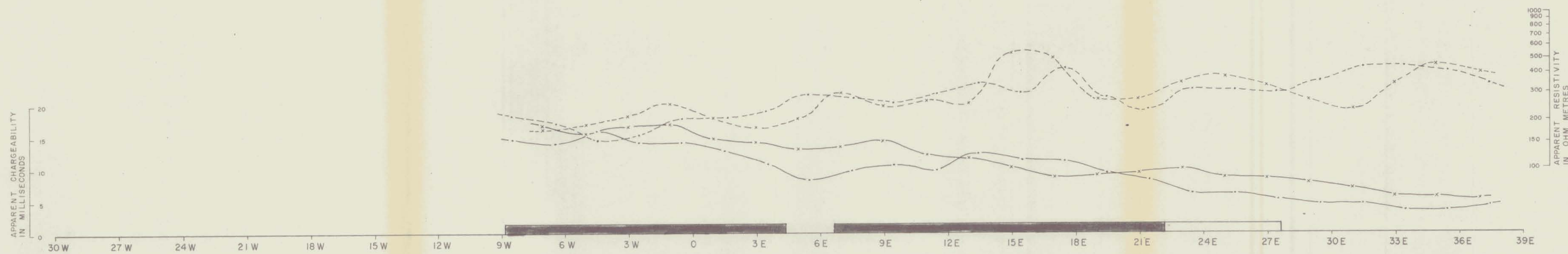
CHARGEABILITY	RESISTIVITY
—•—•—•—•—	-----
—x—x—x—x—x	-----x

a = 300'
a = 600'

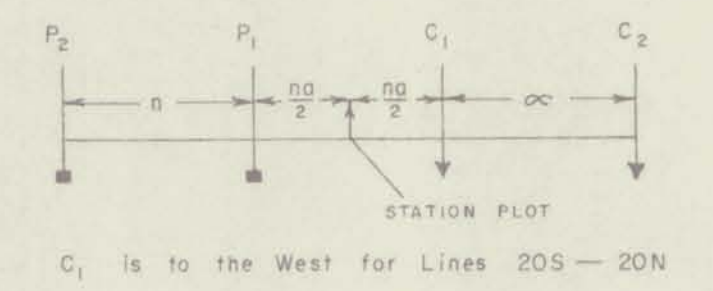
WOLF LAKE JOINT VENTURE
INDUCED POLARIZATION SURVEY
PROFILES OF APPARENT
CHARGEABILITY AND RESISTIVITY

LINE 5N

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY

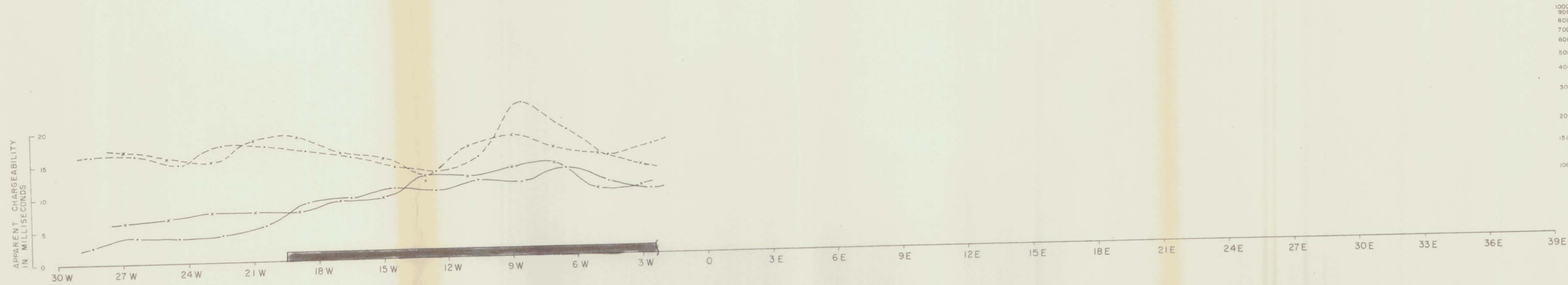


CHARGEABILITY	RESISTIVITY
—•—•—•—•—	-----
x—x—x—x—x—x—x—x—	x-----x-----x-----x-----
	$a = 300'$
	$a = 600'$

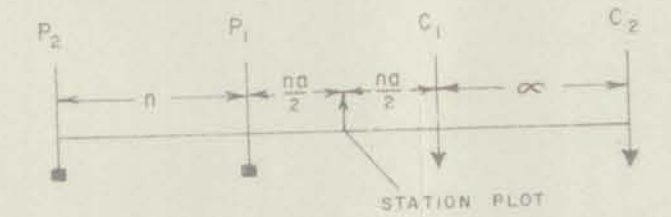
WOLF LAKE JOINT VENTURE
INDUCED POLARIZATION SURVEY
 PROFILES OF APPARENT
 CHARGEABILITY AND RESISTIVITY

LINE 10N

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



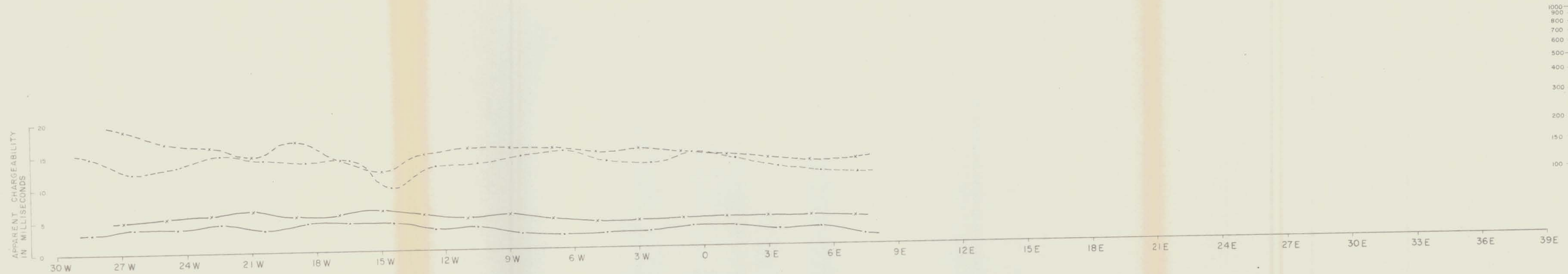
C_1 is to the West for Lines 20S - 20N

CHARGEABILITY RESISTIVITY
 - - - - - $a = 300'$ - - - - -
 x - - - - x $a = 600'$ x - - - - x

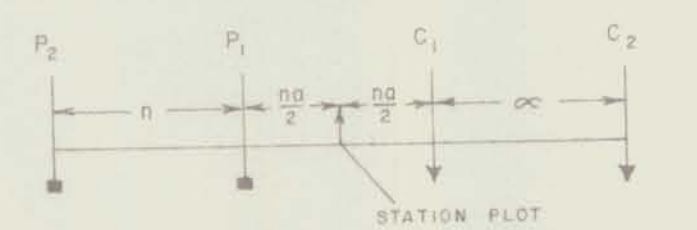
WOLF LAKE JOINT VENTURE
 INDUCED POLARIZATION SURVEY
 PROFILES OF APPARENT
 CHARGEABILITY AND RESISTIVITY

LINE 12+50N

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



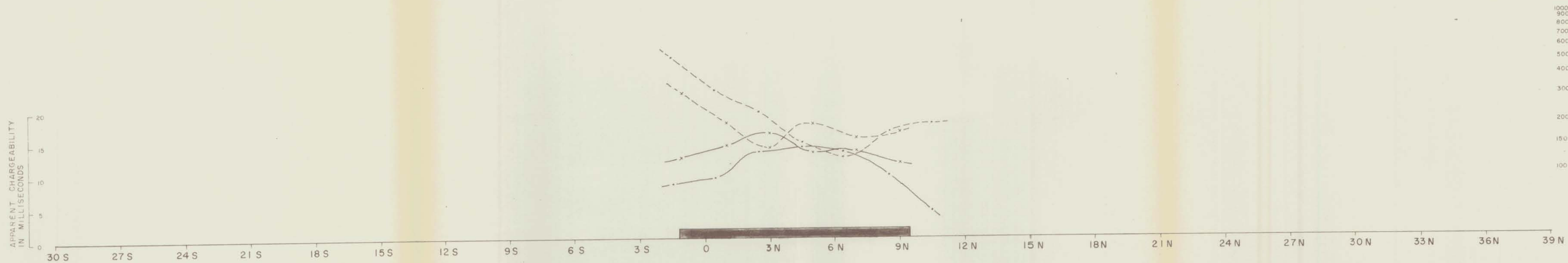
C₁ is to the West for Lines 20S - 20N

CHARGEABILITY	RESISTIVITY
.....
a = 300'	
x-----x	x-----x
a = 600'	

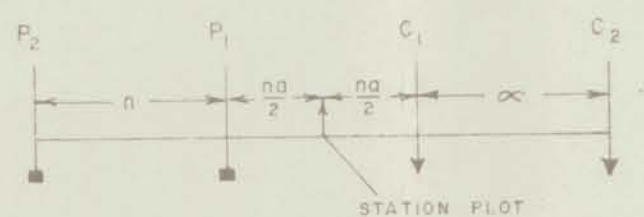
WOLF LAKE JOINT VENTURE
 INDUCED POLARIZATION SURVEY
 PROFILES OF APPARENT
 CHARGEABILITY AND RESISTIVITY

LINE 20N

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



C_1 is to the West for Lines 20S - 20N

CHARGEABILITY RESISTIVITY

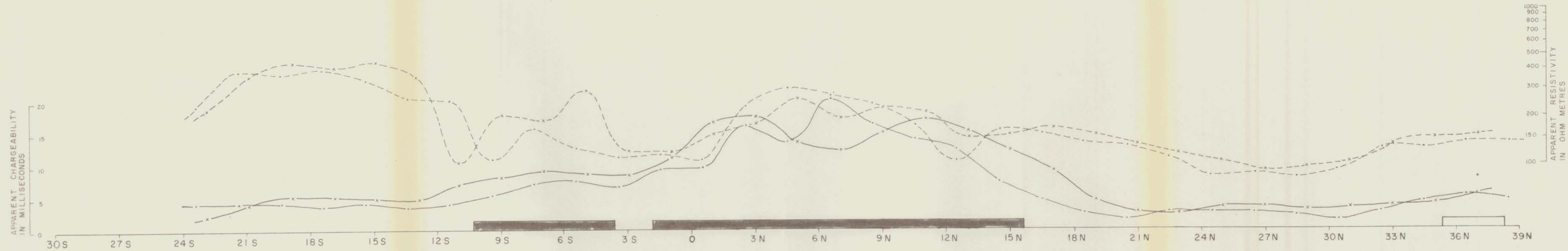
..... $a = 300'$ - - - - -

x - - - - x $a = 600'$ x - - - - x

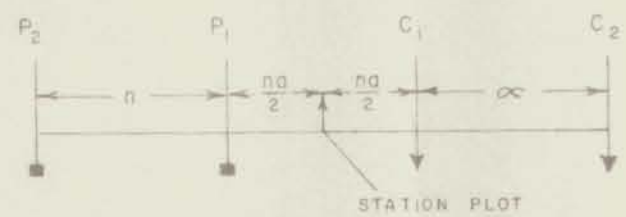
WOLF LAKE JOINT VENTURE
 INDUCED POLARIZATION SURVEY
 PROFILES OF APPARENT
 CHARGEABILITY AND RESISTIVITY

LINE 30 W

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



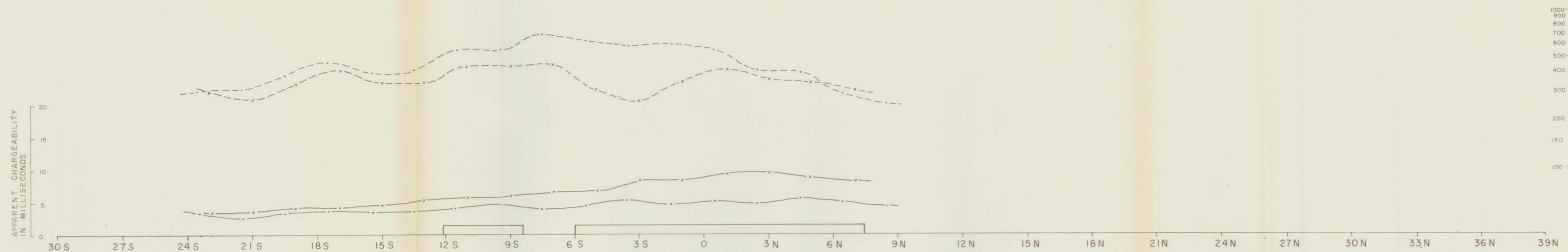
C_1 is to the West for Lines 20S — 20N

CHARGEABILITY RESISTIVITY
 - - - - - $a = 300'$ - - - - -
 x - - - - - $a = 600'$ x - - - - -

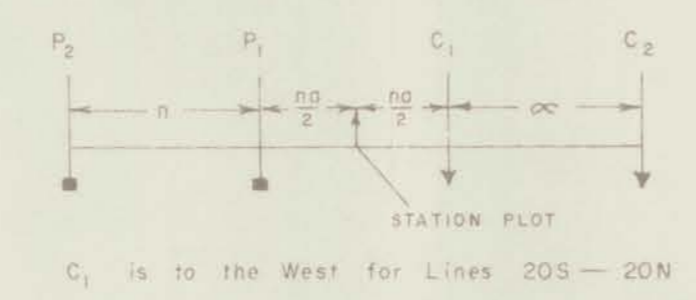
WOLF LAKE JOINT VENTURE
 INDUCED POLARIZATION SURVEY
 PROFILES OF APPARENT
 CHARGEABILITY AND RESISTIVITY

LINE BLO

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



CHARGEABILITY RESISTIVITY
 - - - - - a = 300' - - - - -
 x - - - - - x a = 600' x - - - - - x

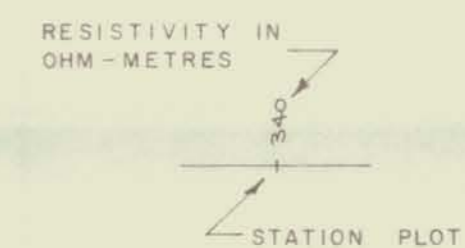
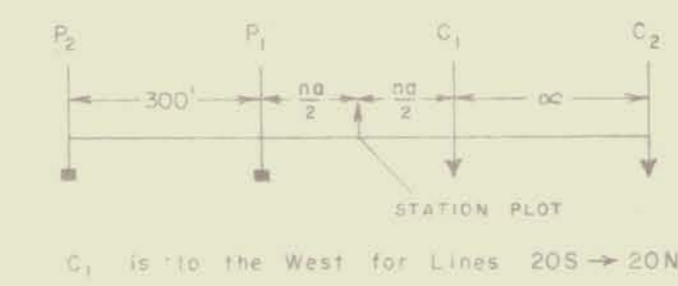
WOLF LAKE JOINT VENTURE
 INDUCED POLARIZATION SURVEY
 PROFILES OF APPARENT
 CHARGEABILITY AND RESISTIVITY

LINE 40E

SCALE: 1 INCH = 300 FEET



POLE - DIPOLE ARRAY



300 100 OHM-METRE CONTOURS

WOLF LAKE JOINT VENTURE

MUNG CLAIMS, WOLF LAKE AREA, YUKON TERRITORY

INDUCED POLARIZATION SURVEY CONTOURS OF APPARENT RESISTIVITY

$$a = 300', n = 1$$

SCALE: 1 INCH = 400 FEET

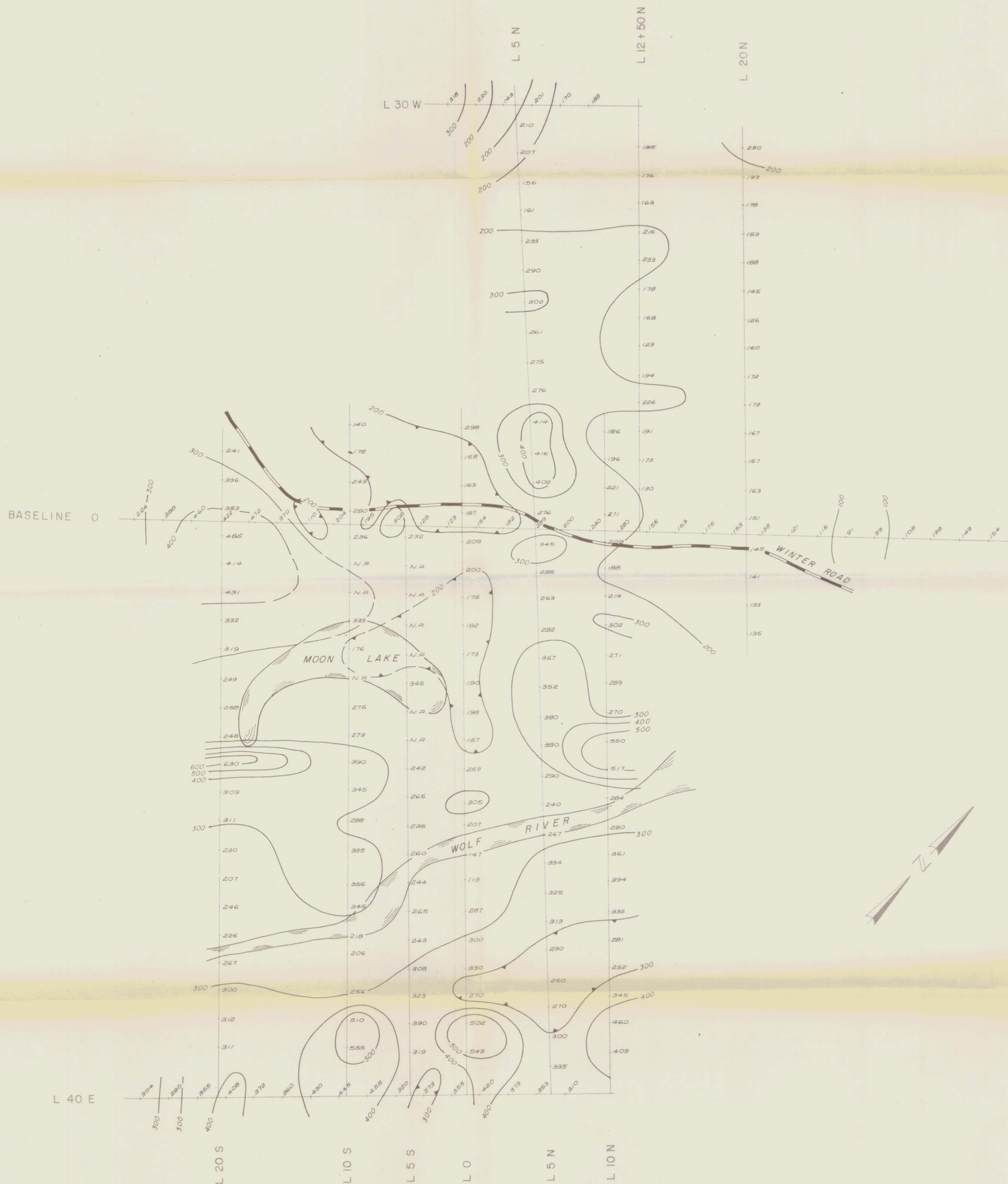


MAP No. W - 159 - 1
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT, P. Eng.
DATED - SEPTEMBER, 1972

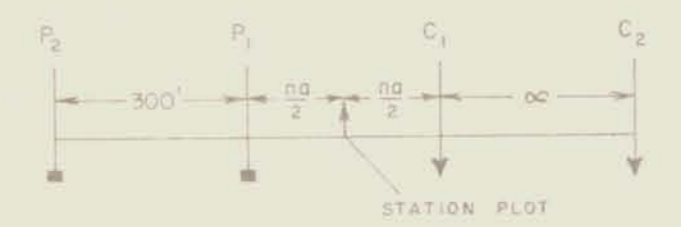
PETER E. WALCOTT & ASSOC. LTD.

AUGUST, 1972

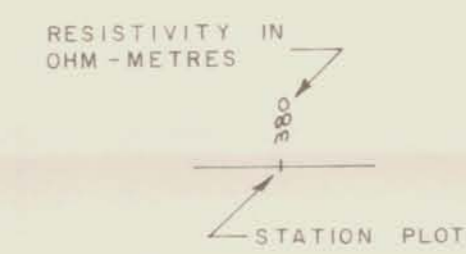




POLE - DIPOLE ARRAY



C₁ is to the West for Lines 20S → 20N



— 300 — 100 OHM-METRE CONTOURS

WOLF LAKE JOINT VENTURE

MUNG CLAIMS, WOLF LAKE AREA, YUKON TERRITORY

INDUCED POLARIZATION SURVEY

CONTOURS OF APPARENT RESISTIVITY

$a = 300'$, $n = 2$

SCALE: 1 INCH = 400 FEET



MAP No. W - 159 - 2

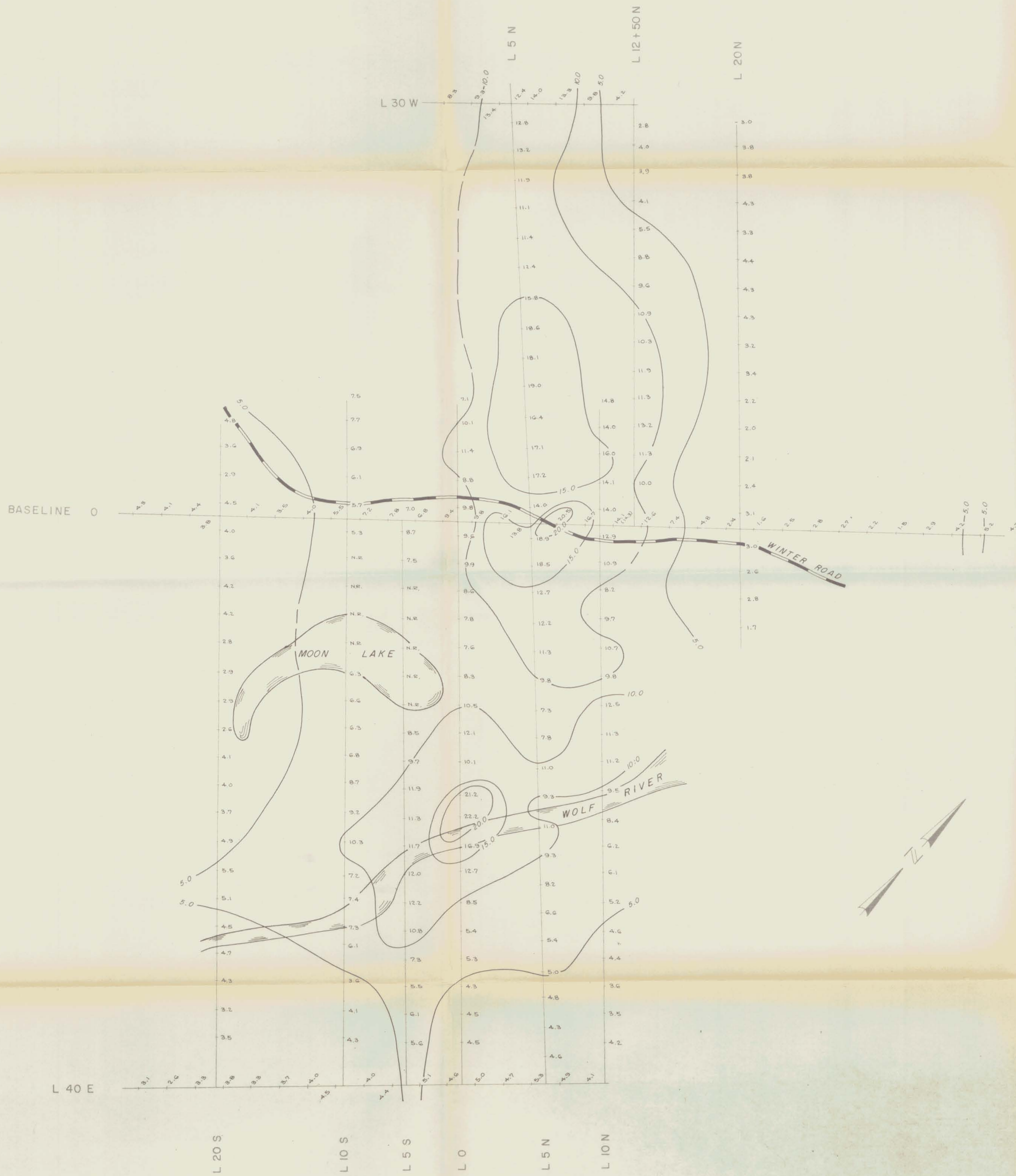
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT, P. Eng.

DATED - SEPTEMBER, 1972

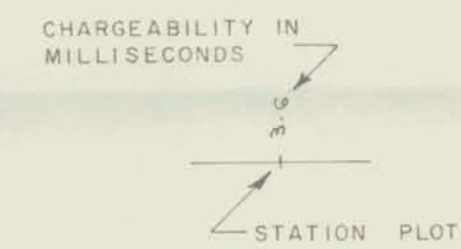
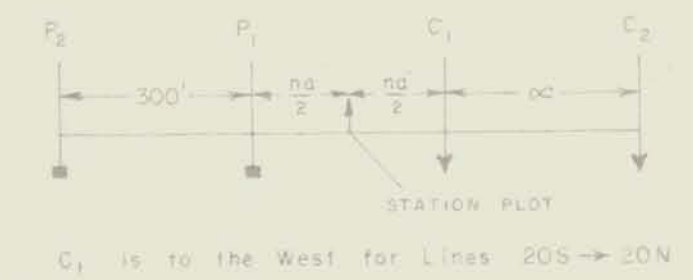
PETER E. WALCOTT & ASSOC. LTD.

AUGUST, 1972





POLE - DIPOLE ARRAY



— 15.0 — 5.0 MILLISECOND CONTOURS

WOLF LAKE JOINT VENTURE

MUNG CLAIMS, WOLF LAKE AREA, YUKON TERRITORY

INDUCED POLARIZATION SURVEY

CONTOURS OF APPARENT CHARGEABILITY

$$a = 300', n = 1$$

SCALE: 1 INCH = 400 FEET



MAP No. W - 159 - 3

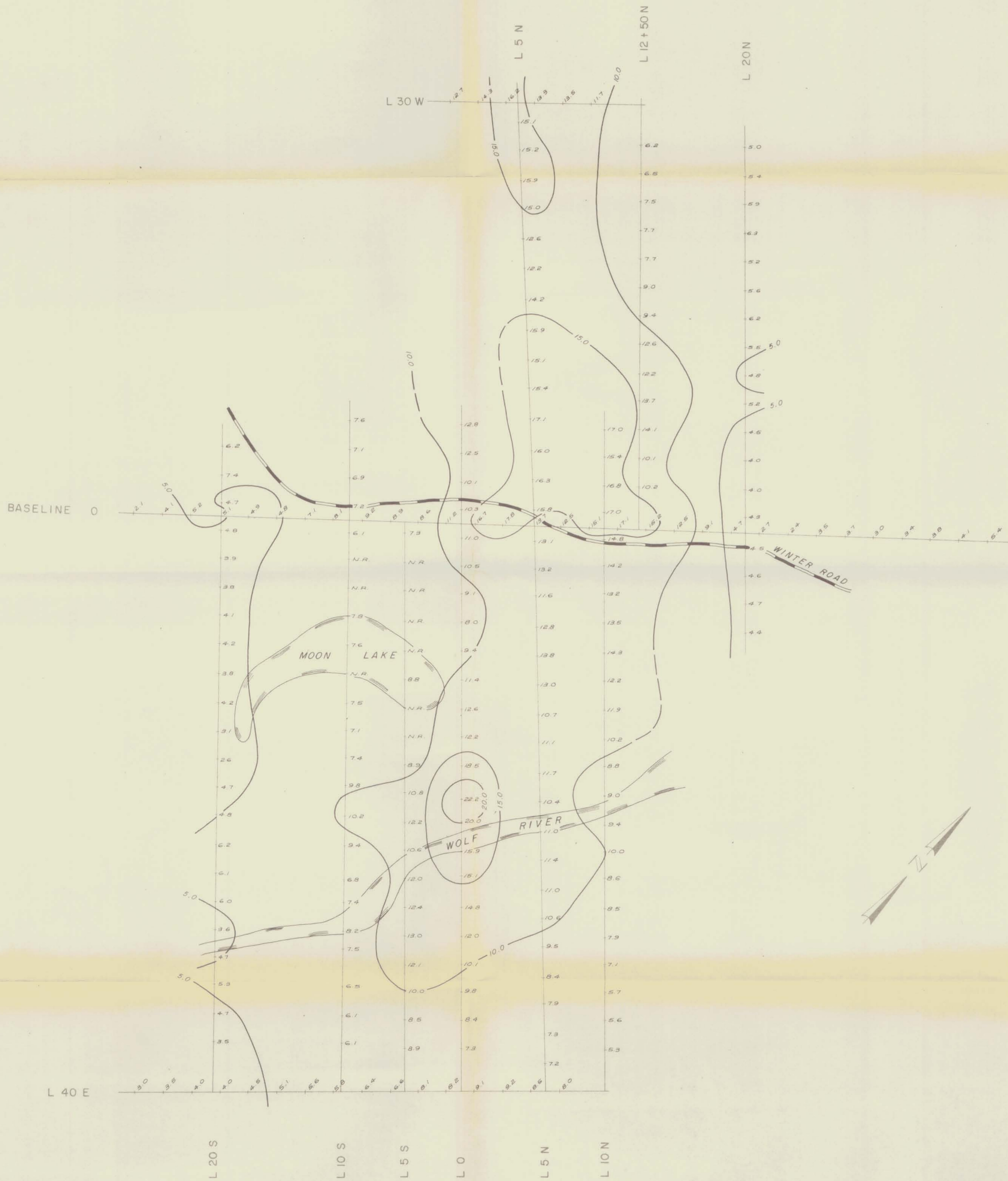
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PETER E. WALCOTT, P. Eng.

DATED - SEPTEMBER, 1972

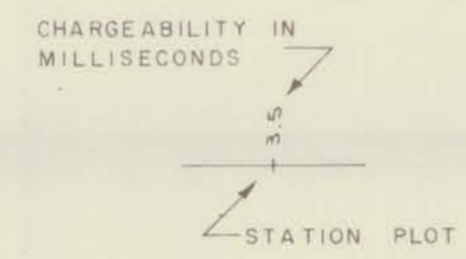
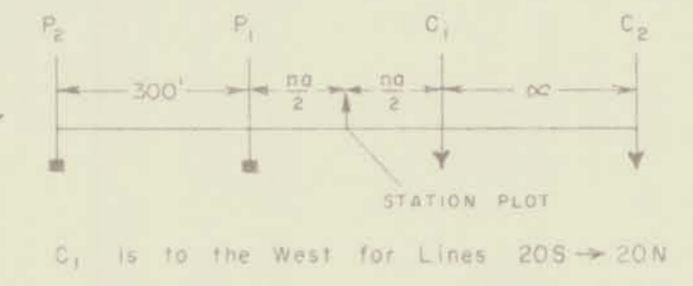
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AUGUST, 1972





POLE - DIPOLE ARRAY



150 5.0 MILLISECOND CONTOURS

WOLF LAKE JOINT VENTURE

MUNG CLAIMS, WOLF LAKE AREA, YUKON TERRITORY

INDUCED POLARIZATION SURVEY

CONTOURS OF APPARENT CHARGEABILITY

$$a = 300', n = 2$$

SCALE: 1 INCH = 400 FEET



MAP No. W-159-4

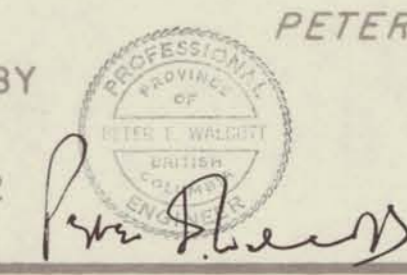
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DATED - SEPTEMBER, 1972

PETER E. WALCOTT & ASSOC. LTD.

AUGUST, 1972



ARCHER, CATHRO
AND ASSOCIATES LTD.
CONSULTING GEOLOGICAL ENGINEERS

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4127
POST OFFICE BOX 1708X
WHITEHORSE, Y.T.

MUNG GROUP ASSESSMENT REPORT

Geology and Geochemistry

Mung 1-16; ~~Y55409-Y55428~~ inclusive

53389-55408

105-B-12

Watson Lake Mining District



Wolf Lake Joint Venture

52 9.85

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ 5419.80

J.R. Craig

Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.

[Signature]
Commissioner of Yukon Territory

R.J. Cathro, P. Eng.

June 20, 1972

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CONCLUSIONS AND RECOMMENDATIONS

The Mung claims cover a porphyry showing which has many features associated with mineralization and soil sampling proved to be ineffective in locating mineralization because of glacial till. Rock geochemistry from outcrops produced anomalous copper assays which are typical of halos surrounding economic porphyry deposits. Further work should be directed towards locating a possible centre of mineralization. This might be accomplished by handpitting to locate bedrock. Float and rock samples can then be examined for alteration and geochemical samples can be taken.

INTRODUCTION

This report covers geological and geochemical surveys carried out during July, 1971 on the Mung 1-16 claims by the Wolf Lake Joint Venture (Caltor Syndicate, Rayrock Mines Ltd., and Ashland Oil Inc.)

LOCATION AND ACCESS

The Mung claims group is located approximately 1/2 mile west of Wolf Lake on the north bank of the Wolf River. The nearest all weather road is the Alaska Highway, 70 miles southwest of the claim group. A winter road, which connects to the Alaska Highway, passes through the claim group on the north side of the Wolf River. The nearest important settlement is Whitehorse, 112 miles to the west. Watson Lake is situated approximately the same distance southeast of the claim group. The claim group is accessible by float equipped fixed wing aircraft and

42597
22550
17 2

by helicopter.

CLAIM DATA

The Mung 1-16 claims, record numbers ~~Y42550-Y42597~~ inclusive, form a roughly square contiguous block and are recorded in the Watson Lake Mining District. The claims are owned by the Wolf Lake Joint Venture (Caltor Syndicate, Rayrock Mines Ltd., and Ashland Oil Inc.).

HISTORY

The ^{Ree} claims were located on July 7, 1971 by the Wolf Lake Joint Venture to cover a weakly gossaned intrusive outcrop discovered during reconnaissance exploration. An old cut grid was discovered about 2 miles southwest of the Mung claim block. No record exists of this or other previous work in the area. Air photos taken between 1949-52 show the grid.

The Wolf Lake Joint Venture, managed by Archer, Cathro and Associates Ltd., carried out geological mapping, prospecting and geochemical sampling on the Mung claims during July & Aug/71.

PHYSIOGRAPHY

The area is flat lying with an elevation under 3500'. Very few outcrops occur and most of the area is covered by glacial till of undetermined thickness.

GEOLOGY

(See Fig. 5A)

The claims are underlain by Lower Cambrian phyllic quartzite and Devonian-Mississippian schistose volcanics, intruded by Jurassic-Cretaceous granodiorite. Several small, leached and altered intrusive outcrops occur along the north side of the Wolf River, for a length of 2000 ft. Alteration varies

from weak at the southwest end near a volcanic contact, to argillic facies in a 1200 ft. section at the northeast end, where leaching, fracturing, and quartz-sericite veining are also strongest. Brecciation is only weakly developed. The rock is a grey-green, medium-grained biotite granodiorite, which weathers a rusty red to grey colour. The rock types are described below:

Jurassic and/or Cretaceous

G.S.C. Unit 15d mainly biotite granodiorite

Devonian and Mississippian

G.S.C. Unit 7a schistose volcanics, greenstone,
chloritic schist.

Lower Cambrian

G.S.C. Unit 1 phyllic quartzite

MINERALIZATION

Mineralization consists of jarosite after pyrite along fractures and in quartz veins. No copper or molybdenum mineralization was seen. This showing has many features usually associated with mineralization, such as: alteration, leaching, fracturing, veining and composition. Rock geochemistry from outcrops along Wolf River produced values five times higher than background in copper, a weak response in molybdenum and background assays in lead, zinc, silver and tungsten. Weakly anomalous assays in copper and tungsten were obtained from breccia samples. Further evaluation was difficult because of an extensive glacial till covering.

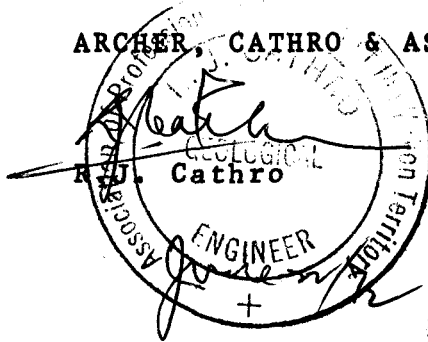
GEOCHEMISTRY

(See Fig.5A and 5B)

A total of 69 soil, rock and silt samples were taken in the claim group. Samples were assayed by Acme Analytical Laboratories Ltd., Burnaby, B.C. for copper, molybdenum, tungsten, zinc, lead, silver, iron and magnesium. Soil samples were ineffective in outlining mineralization because of the glacial till. Rock samples analyzed geochemically were five times background in copper and gave a weak response in molybdenum.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES LTD.



RJC:st

ARCHER, CATHRO

AND ASSOCIATES LTD.

CONSULTING GEOLOGICAL ENGINEERS

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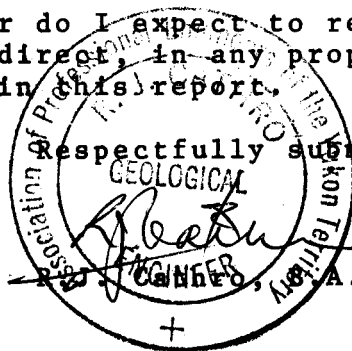
June 19, 1972

CERTIFICATE

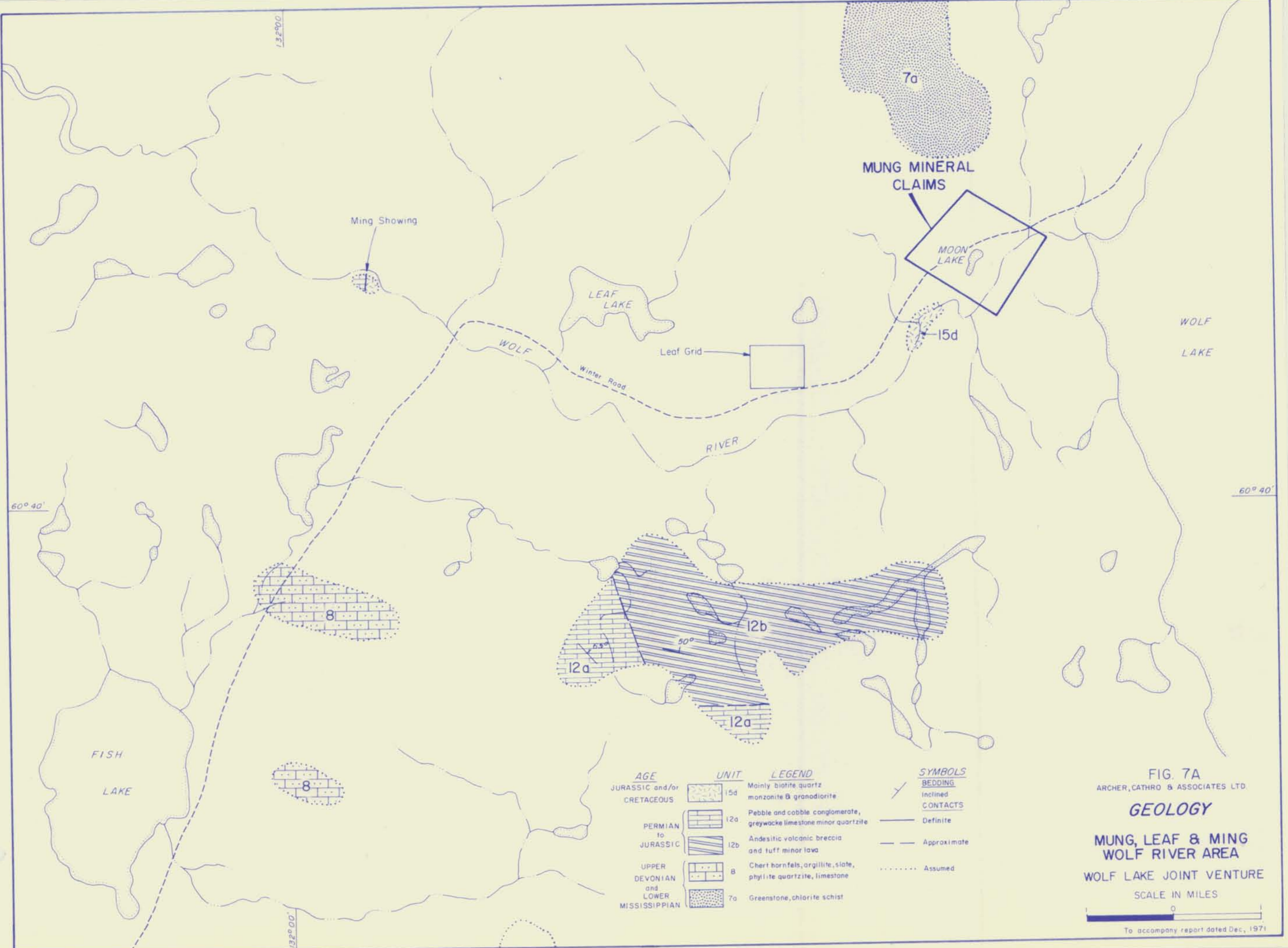
I, Robert J. Cathro, with business address in Whitehorse, Yukon Territory, and residential address in West Vancouver, B.C., do hereby declare that:

1. I am a consulting engineer.
2. I am a 1959 graduate of the University of British Columbia in geological engineering.
3. I am a registered professional engineer in B.C. and Yukon Territory.
4. From 1959 to 1965 I was engaged in Mining and exploration geology and held positions of responsibility with United Keno Hill Mines Ltd., Giant Yellowknife Mines Ltd., and Eldorado Mining and Refining Ltd. I entered private practice in January, 1966.
5. I have personally supervised the work program referred to in this report.
6. I have no interest, nor do I expect to receive any interest, direct or indirect, in any properties or companies referred to in this report.

Respectfully submitted,



A.Sc., P.Eng.



AGE	UNIT	LEGEND	SYMBOLS
JURASSIC and/or CRETACEOUS	15d	Mainly biotite quartz monzonite & granodiorite	Bedding
PERMIAN to JURASSIC	12a	Pebble and cobble conglomerate, greywacke limestone minor quartzite	Inclined
UPPER DEVONIAN and LOWER MISSISSIPPIAN	12b	Andesitic volcanic breccia and tuff minor lava	Contacts
	8	Chert hornfels, argillite, slate, phyllite quartzite, limestone	— Definite
	7a	Greenstone, chlorite schist	- - - Approximate
		 Assumed

FIG. 7A
 ARCHER, CATHRO & ASSOCIATES LTD.
GEOLOGY
 MUNG, LEAF & MING
 WOLF LAKE JOINT VENTURE
 SCALE IN MILES
 To accompany report dated Dec., 1971

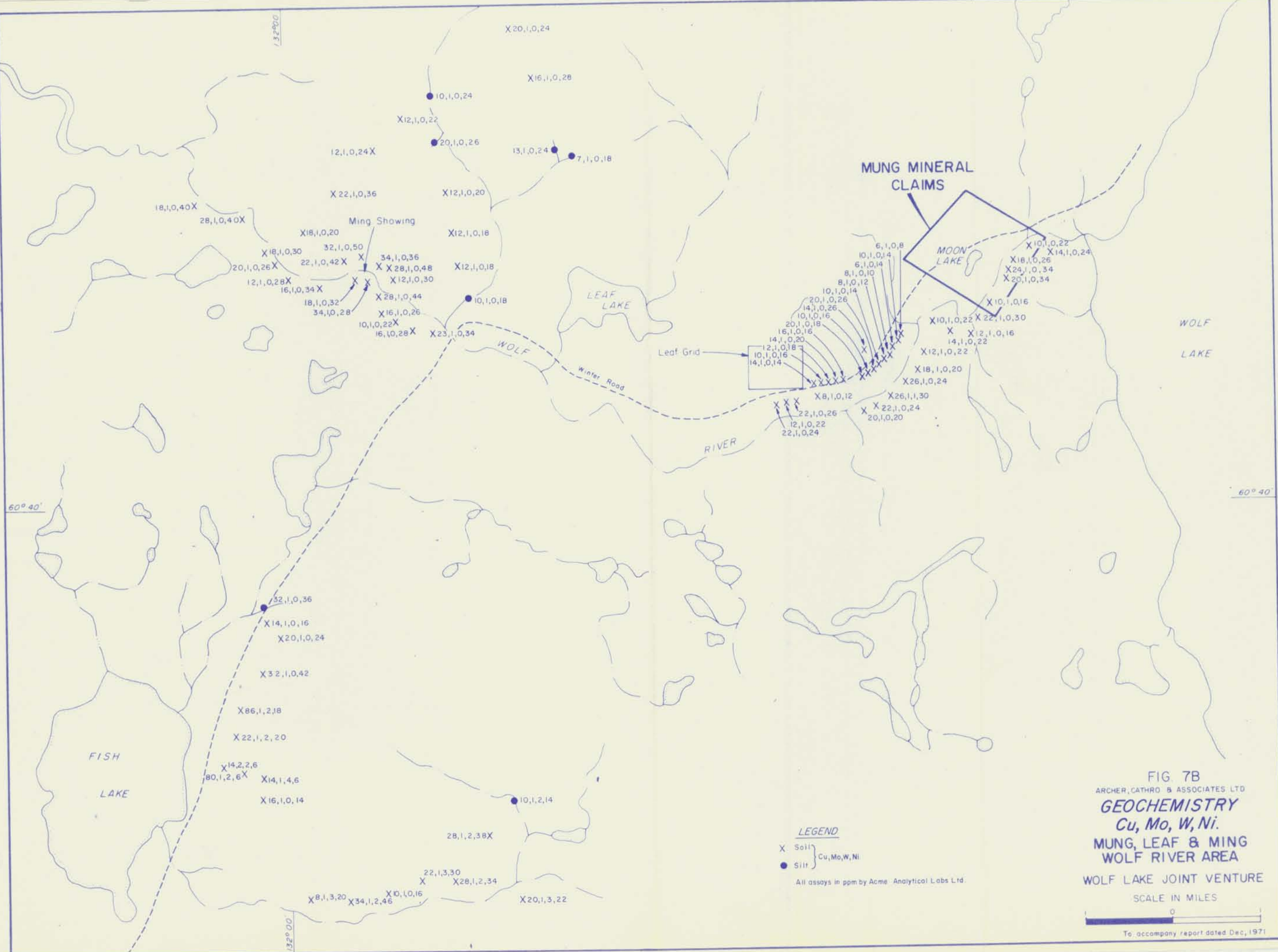


FIG. 7B
 ARCHER, CATHRO & ASSOCIATES LTD
GEOCHEMISTRY
Cu, Mo, W, Ni.
MUNG, LEAF & MING
WOLF RIVER AREA
 WOLF LAKE JOINT VENTURE
 SCALE IN MILES
 To accompany report dated Dec, 1971

LEGEND
 X Soil } Cu, Mo, W, Ni
 ● Silt }
 All assays in ppm by Acme Analytical Labs Ltd.

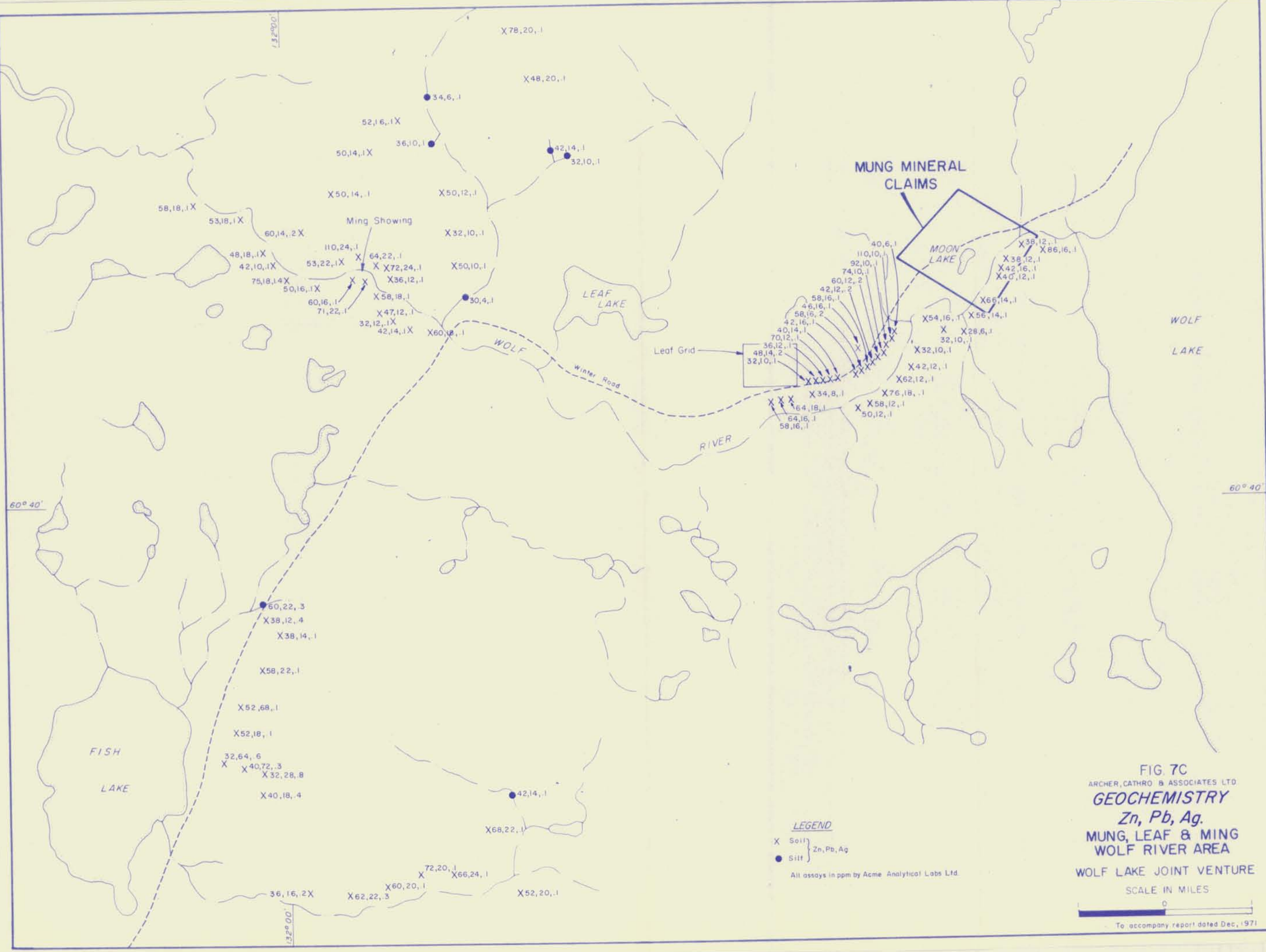


FIG 7C
 ARCHER, CATHRO & ASSOCIATES LTD
GEOCHEMISTRY
Zn, Pb, Ag.
MUNG, LEAF & MING
WOLF RIVER AREA
 WOLF LAKE JOINT VENTURE
 SCALE IN MILES

LEGEND
 X Soil } Zn, Pb, Ag
 ● Silt }
 All assays in ppm by Acme Analytical Labs Ltd.





FIG. 7D
 ARCHER, CATHRO & ASSOCIATES LTD.
AIRBORNE MAGNETIC SURVEY
MUNG, LEAF & MING
WOLF RIVER AREA
 WOLF LAKE JOINT VENTURE
 SCALE IN MILES
 0
 To accompany report dated Nov. 1971
 FROM G.S.C. MAPS. 1335G, 1336G.



LEGEND

- Soil sample • 12,1,2 Copper, Molybdenum, Tungsten in ppm
- Rock sample X 12,1,2 Copper, Molybdenum, Tungsten in ppm
- Rock sample X $\frac{12,1,2}{120'}$ Copper, Molybdenum, Tungsten in ppm
Width
- Silt sample ▲ 34,2,0 Copper, Molybdenum, Tungsten in ppm
- Location line
- ⊗ Claim post

GEOLOGY

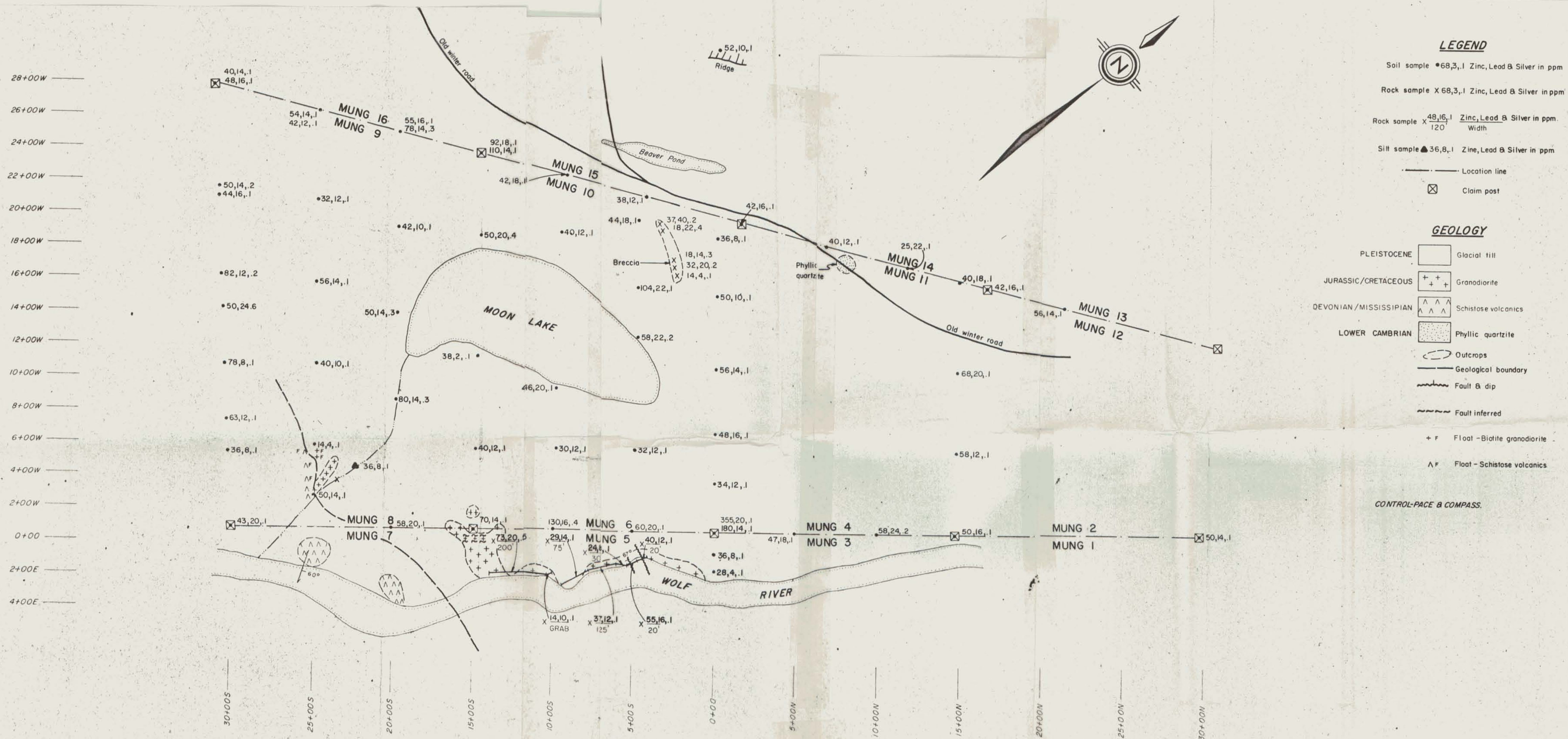
- PLEISTOCENE Glacial till
- JURASSIC/CRETACEOUS ++ Granodiorite
- DEVONIAN/MISSISSIPPIAN ^ ^ ^ Schistose volcanics
- LOWER CAMBRIAN . . . Phyllic quartzite
- Outcrops
- Geological boundary
- ~ Fault & dip
- Fault inferred
- + F Float - Biotite granodiorite
- ^ F Float - Schistose volcanics

CONTROL-PACE & COMPASS

FIG. 5A

ARCHER, CATHRO & ASSOCIATES LTD.

COPPER, MOLYBDENUM & TUNGSTEN
GEOLOGY & GEOCHEMICAL PLAN
MUNG CLAIM GROUP



LEGEND

- Soil sample ● 68,3,1 Zinc, Lead & Silver in ppm
- Rock sample X 68,3,1 Zinc, Lead & Silver in ppm
- Rock sample X $\frac{48,16,1}{120}$ Zinc, Lead & Silver in ppm. Width
- Silt sample ▲ 36,8,1 Zinc, Lead & Silver in ppm
- Location line
- ⊗ Claim post

GEOLOGY

- PLEISTOCENE [] Glacial till
- JURASSIC/CRETACEOUS [+ + +] Granodiorite
- DEVONIAN/MISSISSIPPIAN [^ ^ ^] Schistose volcanics
- LOWER CAMBRIAN [. . .] Phyllic quartzite
- Outcrops
- Geological boundary
- ~ Fault & dip
- Fault inferred
- + F Float - Biotite granodiorite
- ^ F Float - Schistose volcanics

CONTROL-PACE & COMPASS.

FIG. 5B
 ARCHER, CATHRO & ASSOCIATES LTD.
ZINC, LEAD & SILVER
 GEOLOGY & GEOCHEMICAL PLAN
 MUNG CLAIM GROUP
 WOLF LAKE JOINT VENTURE